

1. A method of isolating a target binding molecule, the method comprising:
 administering to a mammal a nucleic acid encoding a fusion protein and
 expressing the fusion protein in the mammal, wherein the fusion protein contains a first
 amino acid sequence and a second amino acid sequence, and wherein the second amino
 acid sequence contains a first member of a specific binding pair;
 removing from the mammal a biological sample that contains the fusion protein;
 binding a second member of the specific binding pair to the fusion protein via the
 first member of the specific binding pair;
 providing a solution containing a target binding molecule, wherein the target
 binding molecule binds to the first amino acid sequence of the fusion protein; and
 isolating the target binding molecule by means of its binding to the fusion protein.

2. The method of claim 1, wherein the first member of the specific binding pair is
 an Fc domain of an immunoglobulin.

3. The method of claim 1, wherein the biological sample is serum.

4. The method of claim 1, wherein the biological sample is tissue lysate.

5. The method of claim 1, wherein the second member of the specific binding
 pair is an antibody.

6. The method of claim 5, wherein the antibody is a monoclonal antibody.

7. The method of claim 1, wherein the target binding molecule is a protein.

8. The method of claim 1, wherein the target binding molecule is an antibody.

9. The method of claim 8, wherein the antibody is prepared in an animal by
 immunizing the animal with a nucleic acid construct encoding the fusion protein.

10. The method of claim 1, further comprising administering a protease inhibitor to the mammal before removing the biological sample from the mammal.

11. The method of claim 2, wherein the target binding molecule is an antibody.

12. The method of claim 11, wherein the antibody is prepared in an animal by immunizing the animal with a nucleic acid construct encoding the fusion protein.

13. The method of claim 1, wherein the target binding molecule is a nucleic acid.

14. The method of claim 2, wherein the target binding molecule is a nucleic acid.

15. The method of claim 1, wherein the target binding molecule is a small molecule.

16. The method of claim 2, wherein the target binding molecule is a small molecule.

17. The method of claim 1, further comprising immobilizing the fusion protein.

18. The method of claim 2, further comprising immobilizing the fusion protein.

19. The method of claim 1, wherein the first member of the specific binding pair is a peptide of at least five amino acids in length.

20. A method of preparing a purified fusion protein, the method comprising:
administering to a mammal a nucleic acid encoding a fusion protein and
expressing the fusion protein in the mammal, wherein the fusion protein contains a first
amino acid sequence and a second amino acid sequence, and wherein the second amino
acid sequence contains a first member of a specific binding pair;
removing from the mammal a biological sample that contains the fusion protein;

binding a second member of the specific binding pair to the fusion protein via the first member of the specific binding pair; and

removing components of the biological sample that are not bound to the second member of the specific binding pair, to thereby provide a purified fusion protein.

5

21. The method of claim 20, further comprising cleaving the first amino acid sequence from the second amino acid sequence.

22. The method of claim 20, wherein the first member of the specific binding pair is an Fc domain of an immunoglobulin.

10

23. The method of claim 20, wherein the biological sample is serum.

24. The method of claim 20, wherein the biological sample is tissue lysate.

15

25. The method of claim 20, wherein the second member of the specific binding pair is an antibody.

26. The method of claim 25, wherein the antibody is a monoclonal antibody.

20

27. The method of claim 22, wherein the second member of the specific binding pair is an antibody.

28. The method of claim 27, wherein the antibody is a monoclonal antibody.

25

29. The method of claim 20, further comprising immobilizing the fusion protein.

30. The method of claim 21, further comprising immobilizing the fusion protein.

30

31. The method of claim 22, further comprising immobilizing the fusion protein.

32. The method of claim 20, wherein the first member of the specific binding pair is a peptide of at least five amino acids in length.

100723 02442